

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested.
Currently, claims 1-18 are pending in this application.

Allowable Subject Matter:

Applicant notes with appreciation the indication that claims 3-5, 10-11 and 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims have been maintained.

Request to Fully Initial and Return Form PTO-1449:

The partial initialization and return of the Form PTO-1449 filed in the March 14, 2002 Information Disclosure Statement (IDS) is noted with appreciation. However, U.S. Patent No. 4,782,517 and reference WO 97-48238 cited on the Form PTO-1449 were not initialed as being considered by the Examiner (or lined through). Applicant therefore respectfully requests that the Examiner fully initial and return the Form PTO-1449 after considering the above cited references. For the Examiner's convenience, Applicant has enclosed a copy of the Form PTO-1449 that was partially initialed and returned.

Request to Acknowledge Applicant's Claim for Priority Under 35 U.S.C. §119 and

Receipt of Priority Document:

The present application is a national phase filing of international application no. PCT/GB99/00986 designating the U.S. and claiming priority from application no. (GB) 9806945.3. The Notification of Acceptance of Application Under 35 U.S.C. §371 and 37 CFR 1.494 or 1.495 (Form PCT/DO/EO/903) mailed March 26, 2001 expressly

acknowledges receipt of the priority document. In light of this earlier acknowledgement that the priority document was properly received by the USPTO via WIPO and the PCT process, the Examiner is respectfully requested to acknowledge Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of Applicant's priority document.

Objection Under 35 U.S.C. §132:

The Amendment filed February 20, 2004 was objected to under 35 U.S.C. §132 because the added material "at least the remainder of the entire set of executable code... (i.e., at least the portions of the set not already stored as a subset in the terminals)" in the amended paragraph beginning at page 5, line 19 of the specification allegedly introduces new matter into the disclosure. Applicant respectfully traverses this objection.

The above noted added material is supported by the original disclosure. For example, page 2, lines 24-26 of the originally-filed specification states "Accordingly, the present invention provides a system in which a terminal only stores code to execute this core behaviour. The remainder of the responses, for handling unusual events, are stored elsewhere at a store in the network (for example at a Network Server computer forming a node of the network)." Moreover, original claim 1 of the present application which recited, *inter alia*, "storing said first group at a first communications terminal, storing at least said second group at a store remote from said first terminal" supports the added material. The "first group of responses" recited in original claim 1 corresponds to the subset of responses (relating to the "core" behavior) stored by the first user terminal, and the "second group of responses" recited in claim 1 corresponds to the "remainder of the

responses” referred to in page 2, lines 24-26 of the originally-filed specification.

Accordingly, the added material “at least the remainder of the entire set of executable code...(i.e., at least the portions of the set not already stored as a subset in the terminals)” does not introduce new matter into the disclosure. Applicant therefore respectfully requests that the objection under 35 U.S.C. §132 be withdrawn. Applicant notes that the above noted paragraph having the added material has been further amended to recite “...at least portions of the set not already stored as a subset of the first terminal 10.”

Rejection Under 35 U.S.C. §112, First Paragraph:

Claim 8 was rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the Office Action alleges that “There is no disclosure of ‘within the set but not within the subset earlier stored at the first terminal’ in the specification as originally filed nor how to perform it.” Applicant respectfully disagrees with this allegation.

As described above, page 2, lines 24-26 provides an adequate written description of this claimed feature. Moreover, page 8, lines 17-19 of the originally-filed specification states “Thus, in this embodiment, there is no need for the terminal 10 to store additional information above the code defining the ‘core’ behaviour within the code store 13, which may therefore be kept compact.” The “subset” corresponds to the “core” behavior responses (i.e., those that are routinely used in contrast to those for handling exceptional events). The remainder of responses form the compliment of the subset in the set. Even further, page 5, lines 7-10 of the originally-filed specification states “Held within the

instruction store 12 is executable code for causing the control circuit 11 to perform a subset of the actions of the User Access Side of the Q2931 protocol, by sensing incoming signals on the data and signalling ports 15, 16 and generating and supplying outgoing signals to those ports.”

Accordingly, Applicant respectfully submits that claim 8 satisfies the written description requirement and thus respectfully requests that the rejection of this claim under 35 U.S.C. §112, first paragraph, be withdrawn.

Rejections Under 35 U.S.C. §102 and §103:

Claims 1-2, 6-9, 12-13, 16-17 and 19¹ were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Ram et al (U.S. ‘924, hereinafter “Ram”). Applicant respectfully traverses this rejection.

For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference. Applicant respectfully submits that Ram fails to disclose each element of the claimed invention. For example, Ram fails to disclose “storing at a communications user terminal which is external to but connected to a communications network via a communications channel, said first group of responses [and] storing at a store in or connected to the communications network, at least said second group of responses,” as required by independent claim 1 and its dependents. Similar comments apply to independent claim 8. Ram also fails to disclose a communications terminal external to a telecommunications network, the communications

¹ Currently, only claims 1-18 are pending.

terminal including a store for storing data defining a core subset of responses corresponding to a core subset of events, and a controller arranged to handle detected events not within the core subset in accordance with received event handling data as required by independent claim 9 and its dependents.

The present invention therefore relates to dividing storage of responses between a user's terminal that is external to a network and a remote store. Page 4, lines 15-17 of the originally-filed specification states "The term 'terminal' herein indicates that the terminals are external to the network (i.e. are at network terminations)...(emphasis added)."

In marked contrast, Ram is concerned entirely with the internal behavior of an intelligent network where a trigger is generated upon recognition of a certain type of service call (e.g., "1-800 translation" at col. 5, line 5). Switch node 24 disclosed by Ram is a programmable switch matrix within the intelligent network, and not an external user terminal.

Applicant also submits that Ram fails to further disclose "separating said protocol into a first group of responses to corresponding first events, and a second group of responses to corresponding second events, wherein said first events occur frequently relative to said second events," as further required by independent claim 1. This feature relates to the first and second groups of responses to events being defined in terms of the relative frequency of the first and second events. Ram fails to disclose this feature. Ram's concept of placing translation services at an SCP connected to a number of SSPs

is not based on the frequency of routable calls to un-routable calls (geographic to non-geographic) but on the objective of reducing costs, since running a translation system into the SSPs of an intelligent network would be more expensive and more complex to maintain than centralizing the translation service at an SCP.

The phrase “separating said protocols” has been amended in the claims to recite -- separating said protocol--. (See, e.g., claim 1, line 4). The present invention is concerned with communication events occurring within a communications protocol which defines a set of states, a set of actions, and the events triggering the performance of the actions and changes of state. A communications protocol can thus be considered as a set of rules, and in this context a communications protocol is not a single rule. This has relevance to the previous statement that “It is not clear how a single protocol is separated into the first group and second group.” (See section 2 of the November 11, 2003 Office Action). The definition of a protocol according to “<http://computing-dictionary.thefreedictionary.com>” is “a set of formal rules describing how to transmit data, especially across a network. Low level protocols define the electrical and physical standards to be observed, bit- an byte-ordering and the transmission and error detection and correction of the bit stream. High level protocols deal with the data formatting, including the syntax of messages, the terminal to computer dialogue, character sets, sequencing of messages, etc.”

Ram discloses a number translation feature which enables a network operator to offer number translation service to its business customers. A corporate entity can thus be allocated a non-geographic telephone number (referred to as a 1-800-number), which it

can advertise globally, and via a translation database in an SCP local to a caller, that call can be routed to a local office of that corporate entity.

In making a call to an 800 number, the caller's telephone interacts with the local office (SSP) in exactly the same way as for a call to a geographic telephone number. In other words, the telephone goes into off hook state; the office responds by sending a dial tone signal; the caller dials a number; and the office processes that number, analyzing it to see where to route the call or whether to request number translation. No further action is required at the caller's telephone.

In contrast, exemplary (but non-limiting) embodiments of the present invention relate to resolving a situation requiring an action by a user terminal, but the required action is not within the core actions stored in the user terminal. Exemplary embodiments of the present invention relate to both the detection of an unknown event being performed at the user terminal, and alternatively being performed in the network. Other exemplary embodiments relate to detecting and resolving the situation where the core actions (i.e., "user access side of the protocol" in the specification) are not an exact match to the core actions stored at the office (i.e., the "network access side of the protocol" in the specification). The detection of such a mismatch in version numbers constitutes an exemplary predetermined event of the present invention.

Upon the occurrence of a predetermined event for which a user terminal does not possess a corresponding response, the event-handling data is sent from a store to the user terminal. The user terminal then proceeds to communicate using that event-handling

data. The user terminal storing event-handling data for a complete set of responses (i.e., the complete protocol set) is avoided. However, corresponding response data is provided to the terminal as appropriate.

In contrast, the number translation disclosed by Ram is not performed at a user terminal. The number translation would therefore not be considered by one skilled in the art as part of the communication/signalling protocol, but rather as an additional service for which customers must pay.

Prior to the introduction of Number Translation Services, all numbers were geographic. The office, under the control of its call processing program, routes a call on the basis of the dialled area code/exchange code, and if, upon analysis of the dialled number, the area code/exchange code was not recognized, an announcement would be started for playback to the caller along the lines of “The number you have dialled has not been recognized.”

When a Number Translation Service is overlaid on the normal call processing program of the office, area code recognition is extended to include NTS prefix recognition, and when one of the in-use prefixes is recognized, e.g., 1800, 1866 or 1877, a message containing the dialled number is sent to the number translation service for translation to a routable number.

The office is thus not determining that there is a situation for which it does not know the response, and is therefore requesting response-handling data. Instead, the office quite specifically determines that it has a known “800” situation, and knows that

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the response to that determination is to send the dialled number to the translation database.

Accordingly, Applicant respectfully submits that claims 1-2, 6-9, 12-13 and 16-17 are not anticipated under 35 U.S.C. §102 in view of Ram. Applicant therefore respectfully requests that the rejection of these claims under 35 U.S.C. §102 be withdrawn.

Since claim 18 depends at least indirectly from claim 9, Applicant respectfully traverses the rejection of this claim for at least the reasons discussed above. Applicant respectfully requests that the rejection of claim 18 under 35 U.S.C. §103 in view of Ram be withdrawn.

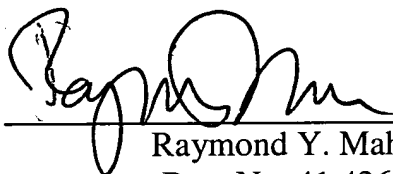
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Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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DISCLOSURE
ATION

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APPLICANT

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GROUP

2758

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

OTHER DOCUMENTS (including Network, Policy, and Other Documents)			
HL	Srinivas Chaganty et al, "Interfacing with Network Elements for Network Management and Control", PROCEEDINGS OF THE PACIFIC RIM CONFERENCE ON COMMUNICATIONS, COMPUT AND SIGNAL PROCESSING, VICTORIA, CA, May 9-10, 1991, Vol. 2, 9 May 1991, pgs. 685-687		
HL	Harris et al, "Intelligent Network Realization and Evolution: CCITT CAPABILITY SET 1 AND BEYOND", PROCEEDINGS OF THE INTERNATIONAL SWITCHING SYMPOSIUM, YOKOHAMA, Oct. 25-30, 1992, 2, No. SMP. 14, pgs. 127-131		
HL	Yechiam Yemini: "The OSI Network Management Model", IEEE COMMUNICATIONS MAGAZINE, Vol. 3 No. 5, 1 May 1993, pgs. 20-29, XP000367615		
*Examiner	H. 0. 116	Date Considered	11-04-03

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.